Table 11. Characteristics of Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

Generic Name (abbreviation)/ Trade Name	Formulation	Dosing Recommendations	Food Effect	Oral Bio-availability	Serum half-life	Intracellular half-life	Elimination	Adverse Events
Abacavir (ABC) **Ziagen®** **Trizivir®** - w/ ZDV+3TC **Epzicom®** - w/ 3TC	Ziagen® 300 mg tablets or 20 mg/mL oral solution Trizivir®- ABC 300 mg + ZDV 300 mg + 3TC 150 mg Epzicom®- ABC 600 mg + 3TC 300 mg	300 mg two times/day; or 600mg once daily; or as Trizivir®- 1 tablet two times/day Epzicom®- 1 tablet once daily	Take without regard to meals; Alcohol increases abacavir levels 41%; abacavir has no effect on alcohol	83%	1.5 hours	12-26 hours	Metabolized by alcohol dehydrogenase and glucuronyl transferase. Renal excretion of metabolites 82% Trizivir® & Epzicom® not for patients with CrCl < 50 mL/min	Hypersensitivity reaction which can be fatal, symptoms may include fever, rash, nausea, vomiting, malaise or fatigue, loss of appetite, respiratory symptoms such as sore throat, cough, shortness of breath
Didanosine (ddI) **Videx®, Videx EC®, Generic didanosine enteric coated (dose same as Videx EC)**	Videx EC® 125, 200, 250, or 400 mg Videx® buffered tabs 25, 50, 100, 150, 200 mg Videx® buffered powders: 100, 167, 250 mg	Body weight ≥ **60kg:** 400 mg once daily (buffered tablets or EC capsule); or 200 mg two times/day (buffered tablets); with TDF: 250 mg/day **< 60 kg**: 250mg daily (buffered tablets or EC capsule); or 125mg two times/day (buffered tablets) with TDF: appropriate dose not established; probably < 250 mg/day	Levels decrease 55%; Take 1/2 hour before or 2 hours after meal	30–40%	1.5 hours	> 20 hours	Renal excretion 50% Dosage adjustment in renal insufficiency (See Table 14)	Pancreatitis; peripheral neuropathy; nausea; diarrhea Lactic acidosis with hepatic steatosis is a rare but potentially life-threatening toxicity associated with use of NRTIs.
Emtricitabine (FTC) **Emtriva™** **Truvada™** - w/ TDF	Emtriva™ - 200 mg hard gelatin capsule and 10 mg/mL oral solution Truvada™ - FTC 200 mg + TDF 300 mg	Emtriva™ - 200 mg capsule once daily or 240 mg (24 mL) oral solution once daily Truvada™ - One tablet once daily	Take without regard to meals	93%	10 hours	> 20 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 14) Truvada™ - not for patients with CrCl < 30 mL/min	Minimal toxicity; lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs.)
Lamivudine (3TC) **Epivir®** **Combivir®**- w/ ZDV ; **Epizicom®**- w/ ABC **Trizivir®**- w/ ZDV+ABC ;	Epivir® 150 mg and 300 mg tablets or 10 mg/mL oral solution Combivir®- 3TC 150 mg + ZDV 300 mg Epizicom® - 3TC 300 mg + ABC 600 mg Trizivir® - 3TC 150 mg + ZDV 300 mg + ABC 300 mg	Epivir® 150 mg two times/day; or 300 mg daily Combivir® - 1 tablet two times/day Epizicom® - 1 tablet once daily Trizivir® - 1 tablet two times/day	Take without regard to meals	86%	5-7 hours	18 -22 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 14) Combivir®, Trizivir® & Epzicom® not for patients with CrCl < 50 mL/min	Minimal toxicity; lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs)

Table 11. Characteristics of Nucleoside Reverse Transcriptase Inhibitors (NRTIs)

Generic Name (abbreviation)/ Trade Name	Formulation	Dosing Recommendations	Food Effect	Oral Bio-availability	Serum half-life	Intracellular half-life	Elimination	Adverse Events
Stavudine (d4T) **Zerit®**	Zerit® 15, 20, 30, 40 mg capsules or 1mg/mL for oral solution	Body weight ≥60 kg: 40 mg two times/day; Body weight <60 kg: 30 mg two times/day	Take without regard to meals	86%	1.0 hour	7.5 hours	Renal excretion 50% Dosage adjustment in renal insufficiency (See Table 14)	• Peripheral neuropathy; • Lipodystrophy • Rapidly progressive ascending neuromuscular weakness (rare) • Pancreatitis • Lactic acidosis with hepatic steatosis (higher incidence with d4T than with other NRTIs • Hyperlipidemia
Tenofovir Disoproxil Fumarate (TDF) **Viread®** **Truvada® -** w/ FTC	Viread® 300 mg tablet Truvada® - TDF 300 mg + FTC 200 mg	Viread® 1 tablet once daily Truvada® 1 tablet once daily	Take without regard to meals	25% in fasting state; 39% with high-fat meal	17 hours	>60 hours	Renal excretion Dosage adjustment in renal insufficiency (See Table 14) Truvada™ - not for patients with CrCl < 30 mL/min	Asthenia, headache, diarrhea, nausea, vomiting, and flatulence; renal insufficiency; lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs)
Zalcitabine (ddC) **Hivid®**	0.375, 0.75 mg tablets Anticipated discontinuation of distribution in 2006	0.75 mg three times/day	Take without regard to meals	85%	1.2 hours	N/A	Renal excretion 70% Dosage adjustment in renal insufficiency (See Table 14)	• Peripheral neuropathy; • Stomatitis; • Lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity with use of NRTIs); • Pancreatitis
Zidovudine (AZT, ZDV) **Retrovir®** **Combivir®-** w/ 3TC ; **Trizivir®- w/** 3TC+ABC **;**	**Retrovir®** 100 mg capsules, 300 mg tablets, 10 mg/mL intravenous solution, 10 mg/mL oral solution **Combivir®** 3TC 150 mg + ZDV 300 mg **Trizivir® -**3TC 150 mg + ZDV 300 mg + ABC 300 mg	**Retrovir®** 300 mg two times/day or 200 mg three times/ day **Combivir® or Trizivir® -** 1 tablet two times/day	Take without regard to meals	60%	1.1 hours	7 hours	Metabolized to AZT glucuronide (GAZT). Renal excretion of GAZT Dosage adjustment in renal insufficiency (See Table 14) Combivir® & Trizivir® - not for patients with CrCl < 50 mL/min	• Bone marrow suppression: macrocytic anemia or neutropenia; • Gastrointestinal intolerance, headache, insomnia, asthenia; • Lactic acidosis with hepatic steatosis (rare but potentially life-threatening toxicity associated with use of NRTIs.